What is claimed is:

1. A motor speed control device, applied to a fan, comprising:

a thermal sensor detecting an environmental temperature of the fan;

a driving element driving the fan to a specific speed according to the detected temperature; and

a control element connected electrically between the driving element and the thermal sensor for adjusting a first voltage of the thermal sensor to change a rotation speed and a temperature range of the fan.

2. The motor speed control device as claimed in claim 1, wherein the thermal sensor is a thermistor.

3. The motor speed control device as claimed in claim 1, wherein the driving element comprises a Hall sensor and a driver IC.

4 The motor speed control device as claimed in claim 1, wherein the control element is a switch circuit.

5. The motor speed control device as claimed in claim 4, wherein the switch circuit comprises a comparator, a transistor, and two resistors.

6. The motor speed control device as claimed in claim 5, wherein one resistor of the switch circuit is electrically connected in parallel with the thermal sensor such that the first voltage rapidly decreases below a

reference voltage of the driving element to turn on the transistor and reduce the temperature range of the fan to a full speed.

7. The motor speed control device as claimed in claim 1, wherein the control element is a resistor electrically connected in serial with the thermal sensor and controlling the temperature range of the fan to a full speed by adjusting a resistance of the resistor and reducing a variation of the first voltage.

8. The motor speed control device as claimed in claim 1, wherein the control element is a subtraction circuit.

9. The motor speed control device as claimed in claim 8, wherein the subtraction circuit comprises a comparator and at least four resistors.

10. The motor speed control device as claimed in claim 9, wherein three resistors of the subtraction circuit generate a second voltage to adjust a third voltage output to the driving element so as to reduce the temperature range of the fan to a full speed.

11. The motor speed control device as claimed in claim 1, wherein the control element comprises a division circuit, a comparator, and an output circuit.

12. The motor speed control device as claimed in claim 11, wherein when the first voltage exceeds a reference voltage of the driving element, the output circuit outputs a

voltage equal to the reference voltage to the driving element so as to keep the fan at a relatively low speed.

13. The motor speed control device as claimed in claim 12, wherein when the first voltage is less than the reference voltage of the driving element, a voltage input to the driving element is divided by N through the division circuit to rapidly drive the fan to a full speed, wherein N is a natural number.

14. A motor speed control device, applied to a fan, comprising:

a thermal sensor detecting an environmental temperature of the fan;

a driving element driving the fan to a specific speed according to the detected temperature; and

a control element connected electrically between the driving element and the thermal sensor for adjusting a first voltage of the thermal sensor, wherein the control element is a switch circuit, and a resistor of the switch circuit is electrically connected in parallel with the thermal sensor such that the first voltage rapidly decreases below a reference voltage of the driving element, reducing a temperature range of the fan to a full speed.

15. A motor speed control device, applied to a fan, comprising:

a thermal sensor detecting an environmental temperature of the fan;

a driving element driving the fan to a specific speed according to the detected temperature; and

a control element connected electrically between the driving element and the thermal sensor for adjusting a first voltage of the thermal sensor, wherein the control element is a resistor electrically connected in serial with the thermal sensor for controlling a temperature range of the fan to a full speed by adjusting a resistance of the resistor and reducing a variation of the first voltage.

16. A motor speed control device, applied to a fan, comprising:

a thermal sensor detecting an environmental temperature of the fan;

a driving element driving the fan to a specific speed according to the detected temperature; and

a control element connected electrically between the driving element and the thermal sensor for adjusting a first voltage of the thermal sensor, wherein the control element is a subtraction circuit, and three resistors of the subtraction circuit generate a second voltage to adjust the first voltage to reduce a temperature range of the fan to a full speed.

17. A motor speed control device, applied to a fan, comprising:

a thermal sensor detecting an environmental temperature of the fan;

a driving element driving the fan to a specific speed according to the detected temperature; and

a control element connected electrically between the driving element and the thermal sensor for adjusting a first voltage of the thermal sensor, wherein when the first voltage exceeds a reference voltage of the driving element, the control element outputs a voltage equal to the reference voltage to be input to the driving element so as to keep the fan at a relatively low speed, and when the first voltage is smaller than the reference voltage of the driving element, the voltage input to the driving element is divided by N through the control element to quickly increase the fan to a full speed, wherein N is a natural number.